REMARKS

Claims 1-25 are pending in this application, of which claims 13-24 are withdrawn from consideration.

§ 102(b) Rejection of Claims 1-12 and 25 over *Magoshi et al.*

Applicants respectfully traverse the rejection of claims 1-12 and 25 under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 6,316,163 to Magoshi et al. ("*Magoshi et al.*"). To properly anticipate Applicants' claims under 35 U.S.C. § 102, each and every element as set forth in the claim must be found, either expressly or inherently described, in a single prior art reference. "The identical invention must be shown in as complete detail as is contained in the . . . claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). *See* MPEP § 2131, 8th Ed. (Rev. 5), August, 2007. *Magoshi et al.* fails to anticipate claims 1-12 and 25 because *Magoshi et al.* does not disclose each and every element of these claims.

Applicants respectfully point out that the Examiner has failed to clearly articulate the § 102(b) rejection of claims 1-12 and 25. "When a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable. The pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified." 37 C.F.R. § 1.104(c)(2) (emphasis added). "The goal of examination is to clearly articulate any rejection early in the prosecution process so that the applicant has the opportunity to provide evidence of patentability and otherwise reply completely at the earliest opportunity." MPEP 706 (emphasis added).

In the rejection, the Examiner has merely attempted to quote the language of claims 1, 2, and 3, and a block of text from *Magoshi et al.* that pertains to a number of distinct embodiments. The Examiner has not explained the pertinence of the particular parts of *Magoshi et al.* that are being relied upon to the elements recited in the rejected claims. The rejection set forth by the Examiner does not provide Applicants the opportunity to reply completely at the earliest opportunity. Thus, Applicants respectfully request that the Examiner designate the particular parts of *Magoshi et al.* that are being relied upon and their pertinence to the elements recited in the rejected claims.

Independent claims 1 and 25 are not anticipated by *Magoshi et al.* for at least the reason that *Magoshi et al.* fails to disclose a method comprising, inter alia, "determining whether or not the distance between the first and second patterns satisfies an allowable margin provided for the distance between the first and second patterns; and correcting, if the distance does not satisfy the allowable margin, at least one of the first and second patterns to satisfy the allowable margin," as recited in claims 1 and 25.

Magoshi et al. discloses "[a] method for forming patterns, in which pattern transfer to the same photosensitive material on a first layer is carried out using both light exposure and charged particle beam exposure" (Abstract). In a fifth embodiment, "the input is design pattern data 10, and data 11 for an electron-beam direct lithography apparatus and data 12 for a photomask writing apparatus are generated as the output" (col. 26, lines 32-35). "In the pattern diagram shown in FIG. 18A, a gate electrode 22 having a pattern width smaller than L is exposed by electron beams and pads 20 and 21 to establish conduction to a wiring layer are exposed by deep-UV light to form the

patterns" (col. 27, lines 10-14). "First, at step P1, the outline of the design pattern 10 is moved toward the inside of the pattern by an amount ΔW1 to reduce the pattern width" (col. 27, lines 15-17). "Next, step P2 extracts patterns exposed by electron beams. For example, . . . patterns having widths smaller than a reference pattern width are extracted as patterns exposed by electron beams. At this time, if the size of the boundary between electron beam exposure and light exposure is defined as a pattern width L of the resist pattern . . ., the boundary size L is narrowed by an amount 2ΔW1 to use a value (L-2ΔW1) as a reference pattern width for extracting patterns exposed by electron beams" (col. 27, lines 22-31). "Next, the outline of the pattern extracted at step P3 is moved toward the outside of the pattern by an amount ΔW2 to increase the pattern width" (col. 27, lines 34-36). "At the final step S4, the pattern 24 exposed by electron beams is converted into data 11 for an electron-beam direct lithography apparatus which is used for electron beam exposure" (col. 27, lines 43-46). "Referring to patterns exposed by light, at step P5, the pad patterns 20 and 21 having sizes greater than L are extracted from the design pattern using the boundary size L between the electron beam exposure and light exposure as a reference. Further, those patterns are converted at step P6 into data 12 for a photomask writing apparatus. Photomask lithography is carried out using the data 12 for a photomask writing apparatus to form photomasks for light exposure" (col. 27, lines 47-54).

The Examiner appears to rely on pattern (22) shown in Figure 18A of *Magoshi et al.* as the "first pattern" recited in claims 1 and 25 of the present application, and the Examiner appears to rely on pad patterns (20, 21) shown in Figure 18A of *Magoshi et al.* as the "second pattern" recited in claims 1 and 25 of the present application.

However, *Magoshi et al.* cannot disclose "determining whether or not the distance between the first and second patterns satisfies an allowable margin provided for the distance between the first and second patterns," as recited in claims 1 and 25, for at least the reason that *Magoshi et al.* is silent as to a "distance between the first and second patterns." Even assuming for the sake of argument that pattern (22) and pad patterns (20, 21) of *Magoshi et al.* constitute the "first and second patterns" recited in claims 1 and 25, which Applicants do not concede, *Magoshi et al.* nevertheless fails to disclose a "distance betweeen" pattern (22) and pad patterns (20, 21). For example, Figure 18A shows that there is not any "distance between" pattern (22) and pad patterns (20, 21). Rather, pattern (22) abuts pad patterns (20, 21).

Moreover, *Magoshi et al.* does not disclose any "allowable margin provided for the distance between the first and second patterns," as required by claims 1 and 25. *Magoshi et al.* discloses defining a value 'L,' such that "patterns having sizes smaller than the boundary size L are exposed by electron beams and patterns having sizes equal to or gr[e]ater than the boundary size L are exposed by deep-UV light" (col. 27, lines 7-10). However, the value 'L' does not represent "an allowable margin provided for the distance between" pattern (22) and pad patterns (20, 21), as required by claims 1 and 25 (emphasis added).

Thus, *Magoshi et al.* fails to disclose "determining whether or not the distance between the first and second patterns satisfies an allowable margin provided for the distance between the first and second patterns," as recited in claims 1 and 25.

Independent claim 10 is also not anticipated by *Magoshi et al.* for at least the reason that *Magoshi et al.* does not disclose a mask pattern forming method comprising, inter alia, "correcting the first design pattern in accordance with a correction rule of a design pattern that is defined by at least one of (i) widths of the first and second design patterns and (ii) a distance between the first and second design patterns," as recited in claim 10.

Magoshi et al. is silent as to "a correction rule of a design pattern that is defined by at least one of (i) widths of the first and second design patterns and (ii) a distance between the first and second design patterns," as required by claim 10. For example, the width of pattern (22) of *Magoshi et al.* is not corrected "in accordance with a correction rule . . . that is defined by . . . [a] width[] of" the pad patterns (20, 21) of *Magoshi et al.* Indeed, Magoshi et al. is silent as to any correction of the pad patterns (20, 21). As shown in *Magoshi et al.*, the pad patterns (20, 21) remain the same after pattern data has been generated (Figure 18D) as before the pattern data has been generated (Figure 18A). Furthermore, as explained above, *Magoshi et al.* fails to disclose any "distance between" pattern (22) and pad patterns (20, 21).

Moreover, claim 10 is not anticipated by *Magoshi et al.* for at least the reason that *Magoshi et al.* fails to disclose "forming a mask pattern by further correcting, by process proximity effect correction, the first design pattern that has been corrected in accordance with the correction rule," as recited in claim 10. For example, in the fifth embodiment of the pattern-forming method of *Magoshi et al.* quoted above, there is not

any disclosure of "further correcti[on]" by "process proximity effect correction," as required by claim 10 (emphasis added).

Since *Magoshi et al.* fails to disclose each and every element of independent claims 1, 10, and 25, these claims and claims 2-9, 11, and 12, which depend from claims 1 and 10, are not anticipated by *Magoshi et al.*

CONCLUSION

In view of the foregoing remarks, Applicants respectfully request reconsideration of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to Deposit Account No. 06-0916.

Respectfully submitted,

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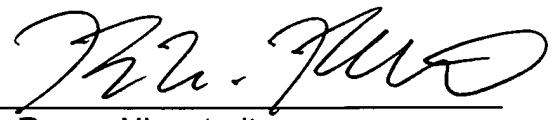
By: 

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